

Date: Sat, 27 Nov 93 04:30:14 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1393
To: Info-Hams

Info-Hams Digest Sat, 27 Nov 93 Volume 93 : Issue 1393

Today's Topics:

Volume 93 : Issue 1393

Cross-band 2m/220mhz repeaters?
Daily Summary of Solar Geophysical Activity for 19 November
Jim Liston
What's a trunked system?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: Sat, 20 Nov 1993 05:58:51 -0700
From: dog.ee.lbl.gov!agate!library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!
nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: ARLD063
To: info-hams@ucsd.edu

SB DX @ ARL \$ARLD063
ARLD063 DX news ZCZC AE89
QST de W1AW DX Bulletin 63 ARLD063 From ARRL Headquarters
Newington CT November 18, 1993
To all radio amateurs

Thanks to Bob, W5KNE; QRZ DX; Tedd, KB8NW; the OPDX PacketCluster Network; John, W2GD; and Frank, OH2LVG, for the items in this week's bulletin.

PETER ONE ISLAND. Here are three brief items of interest. Tony, WA4JOS, reports all equipment for the DXpedition has

been crated. Permission has been secured to operate /MM while enroute to the island. This may be the first-ever satellite operation from Peter One.

SINGAPORE. James, 9V1YC, is on around 7005 kHz between 1045 and 1115z every day looking for North and South American stations. 9V1ZE has been worked on 7005 kHz at 1218z.

BOTSWANA. Arno, OH7XM, plans to be active until December 5 as A25/OH7XM. Listen for him in the CQ WW CW Contest as a 40 meter single category as A22MN. QSL via OH7XM.

UNITED ARAB EMIRATES. Members of the Dubai Men's College of Higher Technology are operating their new club station A61AF. They have equipment for HF, VHF and satellite operations and were heard in the CQ WW SSB Contest. QSL to Dubai Mens College, P0 Box 15825, Dubai, UAE. Only cards dated 3 August 1993 and after are good for DXCC.

BENIN. TY1PS was heard calling CQ on 14083 kHz RTTY around 2300z, with very few takers. He was also heard on 21085 kHz at 1850z.

CAMBODIA. Sanyi, XU7VK, was on 7065 kHz recently around 1230z working YBs and DUs on SSB. He runs a KW into a wire antenna. QSL via HA0HW.

GAMBIA. Gary, C53HG, is active on 75 meters once or twice a week. He hangs around 3795 kHz at 0500z, though has been heard there as late as 0700. Also listen for him on 15 meters between 1800 and 1900z, and then on 20 meters between 2000 and 0100z.

MOZAMBIQUE. C91AJ has been worked on A013 at about 0255z. QSL via CT4RM.

BOSNIA HERZEGOVINA and CROATIA. Carl, OH6XY, team leader of RadioTeam Finland, is serving on the UN High Command on Refugees in the former Yugoslavia. His stay is through November 1994 and can be worked as either 9A/OH6XY or 4N4/OH6XY.

NETHERLANDS ANTILLES. Carl will also be on from Curacao during the CQ WW CW Contest as PJ9Y as a 40 meter single op entry. He will be active before and after the contest period with a bonus of some six meter operations.

Jukka, OH3GZ, is Carl's QSL manager and has the logs for the following calls,

9A/0H6XY, ZA/0H6XY, ZA2A, PJ2/0H6XY, PJ9Y, 4N4/0H6XY and T9/0H6XY.

ARUBA. P40W will be activated November 22 to 30 by John, W2GD, including the CQ WW CW Contest on the 27th and 28th. Outside the contest, John will be active on the WARC bands and on 160 meters on the hour after dark. QSL to N2MM.

FRENCH SAINT MARTIN. Members of the North Jersey DX Association will be active as FS/W2QM from December 1 through 8. They will operate 160 through 10 meters with SSB and CW. OSL to W2QM.

NNNN

/EX

Date: Tue, 23 Nov 1993 19:47:42 GMT
From: butch!news@uunet.uu.net
Subject: Cross-band 2m/220mhz repeaters?
To: info-hams@ucsd.edu

> How many cities and where? I'm curious....

I know denver has 1 2/220 link.. 223.98 to 147.225..

Date: Fri, 19 Nov 1993 21:32:26 MST
From: dog.ee.lbl.gov!agate!library.ucla.edu!news.mic.ucla.edu!unixg.ubc.ca!
nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 19 November
To: info-hams@ucsd.edu

/\/

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

19 NOVEMBER, 1993

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 19 NOVEMBER, 1993

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!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 323, 11/19/93
10.7 FLUX=101.1 90-AVG=094      SSN=059      BKI=3622 2333  BAI=020
BGND-XRAY=B1.4    FLU1=9.4E+05  FLU10=1.3E+04 PKI=3622 3433  PAI=020
BOU-DEV=031,154,013,017,015,029,023,021  DEV-AVG=037 NT  SWF=00:000
XRAY-MAX= B9.8 @ 2003UT  XRAY-MIN= B1.2 @ 1737UT  XRAY-AVG= B2.4
NEUTN-MAX= +002% @ 2320UT  NEUTN-MIN= -002% @ 1745UT  NEUTN-AVG= -0.1%
PCA-MAX= +0.0DB @ 2355UT  PCA-MIN= -0.1DB @ 2000UT  PCA-AVG= -0.0DB
BOUTF-MAX=55375NT @ 0358UT  BOUTF-MIN=55334NT @ 1842UT  BOUTF-AVG=55350NT
GOES7-MAX=P:+000NT@ 0000UT  GOES7-MIN=N:+000NT@ 0000UT  G7-AVG=+063,+000,+000
GOES6-MAX=P:+128NT@ 1654UT  GOES6-MIN=N:-072NT@ 1044UT  G6-AVG=+087,+019,-041
FLUXFCST=STD:105,105,110;SESC:105,105,110 BAI/PAI-FCST=010,010,015/010,012,015
KFCST=2233 3221 2233 4321 27DAY-AP=010,009 27DAY-KP=2342 2232 4222 1221
WARNINGS=*SWF
ALERTS=**245STRM:0622-0733UTC
!!END-DATA!!
```

NOTE: The Effective Sunspot Number for 18 NOV 93 is not available.
The Full K_p Indices for 18 NOV 93 are: 2- 1- 1o 1o 4+ 5+ 4o 3+

SYNOPSIS OF ACTIVITY

Solar activity was low. Region 7618 (N07W19) continues to be the most impressive region on the disk. Overall, the Region has been stable the past 24 hours. Region 7620 (N04E57) appears stable as well.

STD: A delta configuration continues to exist in Region 7618.

Solar activity forecast: solar activity is expected to be low to moderate with Region 7618 expected to produce C-class and possibly M-class activity.

STD: A new region is approaching the northeast limb. Recent Yohkoh x-ray imagery of this area suggests a possible eruptive region may be rotating into view shortly. This supposition is strengthened by NSO observations of enhanced (moderate) Ca XV limb emissions at this region. NSO plots of these emissions, as well as pseudo-full-disk maps are available at the anonymous FTP site: [ftp.uleth.ca](ftp://ftp.uleth.ca) (previously known as xi.uleth.ca) in the directories "pub/solar/Corona/Scans" and "pub/solar/Corona/Maps". There may be some additional Ca XV emission intensification over the next 24 hours from this area of the northeast limb. Recent optically uncorrelated long-decay B and C-class x-ray

activity may be originating from this site. Another Yohkoh x-ray insert has been appended to this report showing this new limb source of x-ray emissions.

The geomagnetic field has been at quiet to major storm levels at middle latitudes and quiet to severe storm levels at high latitudes. Yesterday's disturbance continued through 06Z today with active to storm level conditions. Since then, the field has been mostly quiet to active with some brief storm levels at high latitudes.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled. Recurrence effects may increase activity sometime late on day three.

Event probabilities 20 nov-22 nov

Class M	60/60/60
Class X	10/10/10
Proton	10/10/10
PCAF	Green

Geomagnetic activity probabilities 20 nov-22 nov

A. Middle Latitudes	
Active	20/10/45
Minor Storm	10/05/15
Major-Severe Storm	05/01/05
B. High Latitudes	
Active	40/10/65
Minor Storm	05/05/05
Major-Severe Storm	01/20/01

HF propagation conditions became occasionally below-normal for the upper-middle to polar latitude paths during the local night sector of 19 November. Most other regions experienced near-normal propagation. Conditions are expected to gradually improve on 20 and 21 November. Additional minor signal degradation may be observed again over the higher latitude paths on 21 November in response to recurrent activity. At the present time, no significant changes are expected over the next three days. SWF activity is still a good possibility over sunlit paths.

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 19/2400Z NOVEMBER

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7618 N07W19 339 0750 DKI 09 038 BETA-DELTA
7620 N04E57 263 0000 AXX 01 001 ALPHA

REGIONS DUE TO RETURN 20 NOVEMBER TO 22 NOVEMBER

NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 19 NOVEMBER, 1993

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1625 1625 1626 280

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 19 NOVEMBER, 1993

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
19/ 1845 2004 2051 LDE B9.8 126

INFERRRED CORONAL HOLES. LOCATIONS VALID AT 19/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
48 S34W42 S37W62 S08W74 S07W70 024 ISO NEG 012 10830A
49 N30E18 N20E08 N30E04 N34E11 316 ISO POS 003 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz

18 Nov: 0349 0358 0404 B7.3
1135 1230 1303 B5.1 SF 7618 N08E02
1323 1332 1347 C1.6 SF 7618 N09E01
1522 1525 1538 SF 7618 N07W03
1654 1659 1707 C1.5
1658 1658 1710 SF 7618 N06W03
1928 2115 2155 C1.4

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

	C	M	X	S	1	2	3	4	Total	(%)
--	--	--	--	--	--	--	--	--	--	--
Region 7618:	1	0	0	4	0	0	0	0	004	(57.1)
Uncorrellated:	2	0	0	0	0	0	0	0	003	(42.9)

Total Events: 007 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
--	--	--	--	--	--	--	--	--
								NO EVENTS OBSERVED.

NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

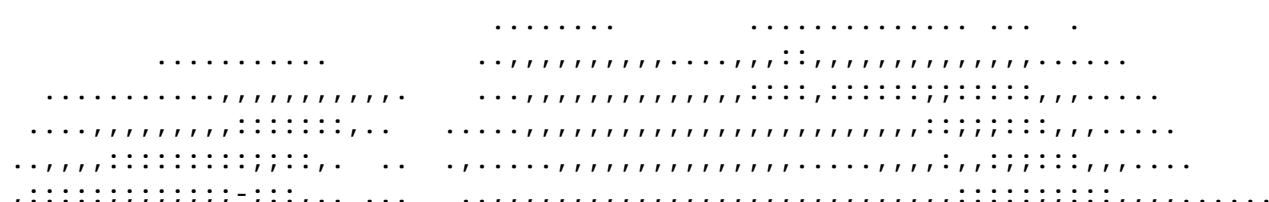
Acronyms used to identify sweeps and optical phenomena include:

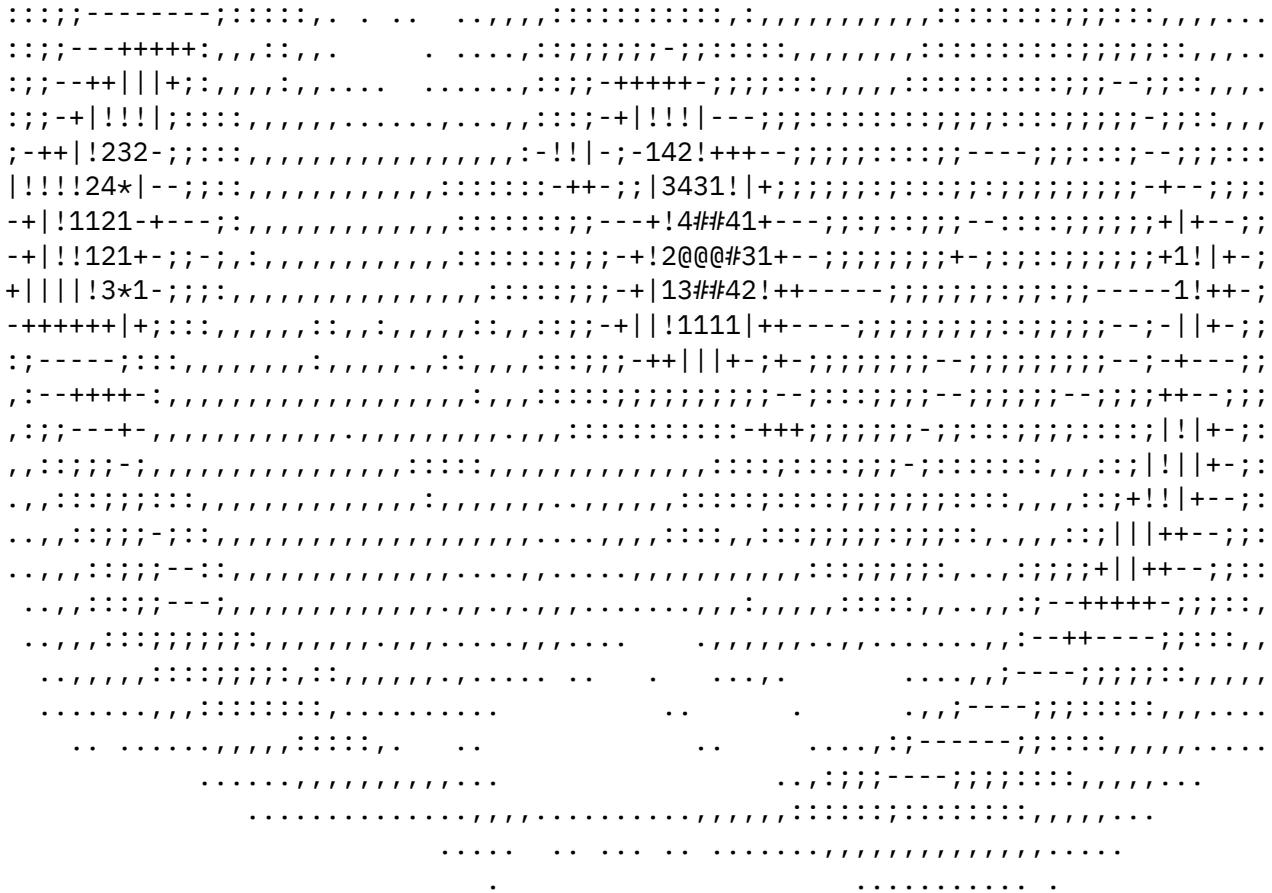
II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

SPECIAL INSERT: CURRENT X-RAY EMISSIONS FROM THE JAPANESE YOHKOH SPACECRAFT

19 November 1993, 03:30 UTC

North





South

KEY: East and west limbs are to the left and right respectively. Emission strength, from minimum to maximum are coded in the following way:

[space] . , : ; - + | ! 1 2 3 4 * # @

Units used are arbitrary, for illustrative purposes. Get "showasc.zip" from "pub/solar/Software" at the anonymous FTP site: xi.uleth.ca (IP # 142.66.3.29) to view these images on VGA screens.

** End of Daily Report **

Date: Tue, 23 Nov 1993 17:56:51 GMT
From: nntp.ucsb.edu!library.ucla.edu!europa.eng.gtefsd.com!avdms8.msfc.nasa.gov!
sol.ctr.columbia.edu!usenet.ucs.indiana.edu!silver.ucs.indiana.edu!
djadams@network.ucsd.edu
Subject: Jim Liston

To: info-hams@ucsd.edu

Greetings! Could Jim Liston (who sold me the tr-3600a) please e-mail me? I have a question about the rig which the manual doesn't cover, and I'm hoping you may know the answer. Thanx.

Dave

David J Adams, N9UXU Internet: djadams@silver.ucs.indiana.edu
Amiga User and Flow Cytometry Advocate
Looking for a mobile 2m and/or 70cm rig
Conure Society of America. "Push the button Frank..."

--- . -.. -.- .- -- .. --. --

Date: Thu, 25 Nov 93 19:36:36 CST
From: hp9000.csc.cuhk.hk!uxmail!hk.super.net!psinntp!psinntp!sunic!EU.net!
howland.reston.ans.net!usenet.ins.cwru.edu!eff!news.kei.com!news.oc.com!
utacfd.uta.edu!rwsys!scilab!@munnari.oz.au
Subject: What's a trunked system?
To: info-hams@ucsd.edu

trier@odin.ins.cwru.edu (Stephen C. Trier) writes:
> Every now and then, I see references to "trunked systems" popping up in
> the rec.radio.amateur groups. Just what is a trunked system?

Ahoy, Stephen!

I would imagine that some of the implementation details vary from implementation to implementation, but here in Dallas/Ft Worth there are a number of different systems in use. Here's how they work in common.

A series of frequencies are assigned to an agency or municipality. All those frequencies are programmed into all the radios for the service, and a single channel acts as a control frequency. That control frequency has a continuous data stream being received by all radios in the service. It instructs all the radios as to which frequency corresponds to a given "channel".

These channels are "logical channels". Unlike traditional radio systems, there is not a permanent correspondence between "frequency" and "channel." For instance: Here in Arlington, there is a common data frequency and six or so voice frequencies. However, the fire department radios have a dozen or so channels (about twice the number of frequencies). At any given moment, the data channel assigns frequencies to the radios as they are needed.

Much like a computer network, this allows the system to provide maximum use of the spectrum. But, much like the phone system, it relies on the assumption that not all channels or "paths" are in use at a given time.

To the disappointment of many scanner users, some trunked systems switch frequencies very quickly and can be difficult to monitor, particularly if "good listening" systems are shared with "boring systems." The switching rate of systems in the Dallas/ Ft Worth metroplex vary from about once an hour (as needed for demand on channels) to once per transmission. To top it off, GE trunked systems often have "scanner defeat" features. For instance, one system in the area is supposed to be playing tone sequences after every transmission (while the data-switched radios move to a new frequency). So all the scanners are locked onto these silly "doorbell" tones while all the good stuff is going on somewhere else. However, there are some folks selling kits or radio mods to defeat the squelch lock on those tones.

Hope that helps some.

Cheerio!

Carter R. Bennett, Jr. [Scientist]
carter@scilab.lonestar.org
KI5SR

Date: Wed, 24 Nov 1993 20:40:48 GMT
From: netcomsv!netcom.com!greg@decwrl.dec.com
To: info-hams@ucsd.edu

References <arog.753969080@BIX.com>, <1993Nov23.113409.29442@ke4zv.atl.ga.us>, <LEVIN.93Nov24114340@powell.bbn.com>asa.gov
Subject : Re: CONELRAD-what was it?

What a lot of people don't remember is that hams were required to respond to Conelrad alerts by going off the air. To this end, they were required to monitor a local broadcast station at all times while on the air, in order to determine if there was an alert. Some old ARRL handbooks that I have contain ads (there used to be a really neat ad section in the back, with things like J.W. Miller, and so on) for Conelrad alert monitors, some of which contained features that would shut down the plate current in event of an alert.

Greg

End of Info-Hams Digest V93 #1393
